BOSTON UNIVERSITY
SCHOOL OF SOCIAL WORK

A FOLLOW-UP STUDY OF THE ADJUSTMENT OF NEUROPSYCHIATRIC CASUALTIES IN THE ARMED FORCES

A Study of Forty-two Massachusetts Soldiers Discharged in World War II

A Thesis

Submitted by

Pearl Ella Nanscawen

(B.S., Boston University College of

Practical Arts & Letters, 1931)

In Partial Fulfillment of Requirements for

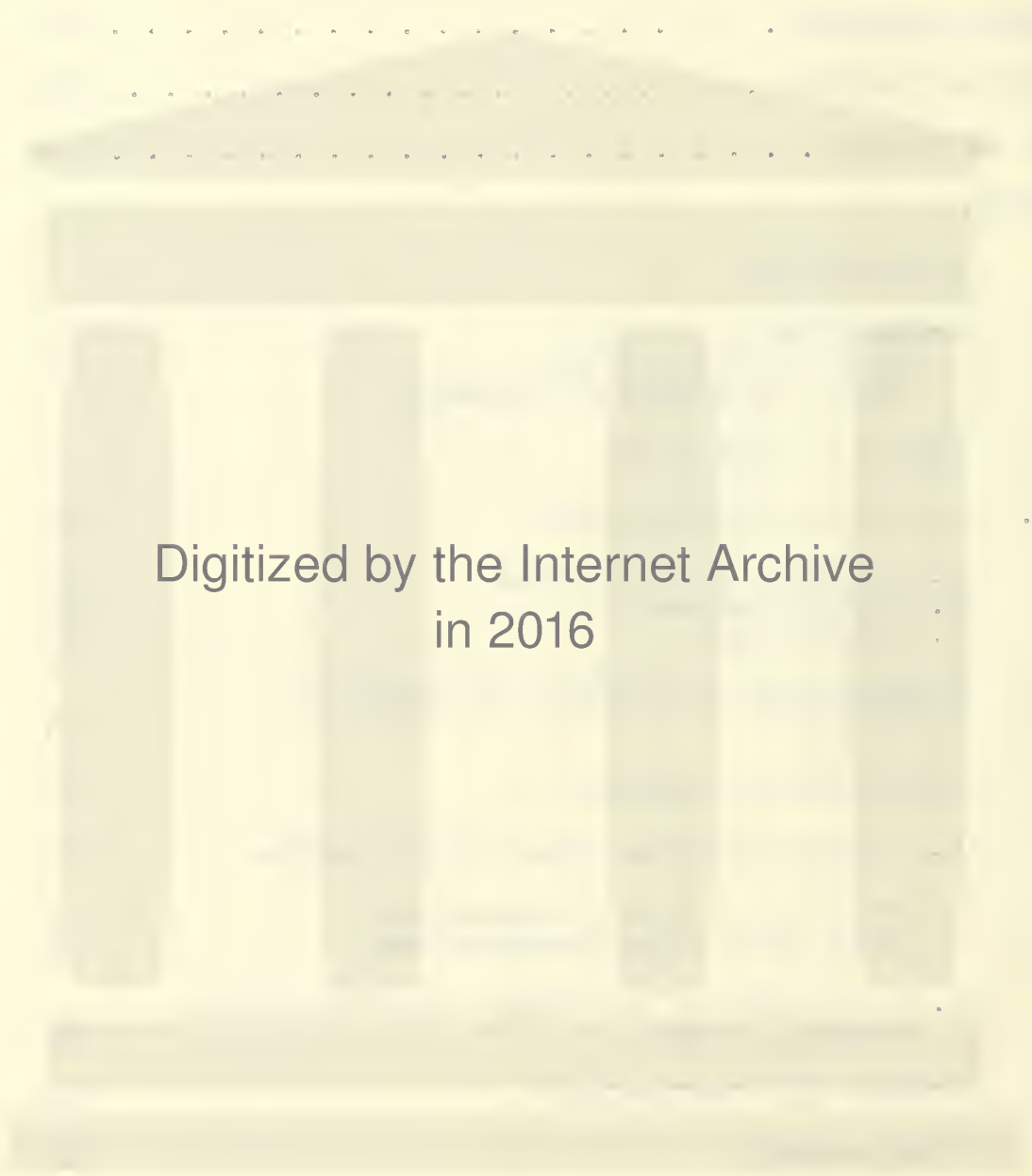
the Degree of Master of Science in Social Service

1949

ACKNOWLEDGMENTS

The writer wishes to express her sincere gratitude to Mrs. Irene T. Malamud, Research Social Worker, Worcester State Hospital, for her intelligent direction and generous donation of time to the development of this thesis. The writer is also extremely grateful to Dr. Sidney L. Sands, Resident Director of the Research Service, Worcester State Hospital, for his helpful criticisms and suggestions; to the School of Social Work, Simmons College, Boston, Massachusetts, for their cooperation in the loan of the 1943 Thesis done by Rachel B. Stephenson, then a student in their school, and to Miss Rebecca Glasmann, Chief, Social Service, Veterans Administration, Bedford, Massachusetts, for the time and effort spent in obtaining and contributing necessary and helpful information on those patients who were part of the 1943 study but are now in the hospital at Bedford.

TABLE OF CONTENTS



LIST OF TABLES

CHAPTER I

INTRODUCTION

METHODOLOGY

Purpose of the Study

In 1943 a socio-psychiatric study was conducted at the Worcester State Hospital of a group of forty-two men discharged from the Armed Forces in World War II for neuropsychiatric conditions. The purpose of the study was to attempt to arrive at a better understanding of the readjustment problems confronting soldiers who had to be discharged because of neuropsychiatric reasons.[1] It was felt at that time that an understanding of the work done with the men (both psychiatrically and socially), some knowledge of the causes of the breakdowns in military service, and their relation to the clinical pictures, would offer some understanding of the problems met with in the rehabilitation of patients of this type.[2] Results of this study done in 1943 will be discussed in Chapter III.

The purpose of the present study is to investigate systematically this same group of cases after an interlude of five years in order to evaluate the factors related to successful readjustment of these men or to another breakdown.

---

1 Irene T. Malamud and Rachel B. Stephenson, "A Study of the Rehabilitation of Neuro-Psychiatric Casualties Occurring in the Armed Forces", Applied Anthropology, p. 1, January-March, 1944.

2 Ibid., p. 1.

It is hoped that answers to the following general questions will be found:

(1) Has there been a shift in the four[3] groupings set up in the previous study?

(2) What are the significant factors that seem to have a bearing on these changes?

(3) Has there been an obvious change in socio-economic level?

(4) What is the subject's present attitude toward his past illness and hospital treatment?

Scope and Method of Procedure

Thirty-seven patients were studied in this presentation. The original group was composed of forty-two military cases referred to the Research Service of the Worcester State Hospital between September 1, 1942 and October 1, 1943, a period in which psychotic military patients were discharged from army hospitals back to their communities for care in civilian hospitals. The writer was unable to locate four of these men and one was deceased. A study of this group of forty-two soldiers was made in 1943 in order to find out what was the status at that time of the group over a follow-up period that lasted from about three to nine months. These soldiers had been in the Worcester State Hospital on the Research Service for a

---

3 See p. 18 for description of these groupings.

period of intensive work-up and treatment and the majority were out of the hospital.

The social histories for the original study were obtained on each of these patients by the Social Worker in the Research Service and the interval social histories for the present study (see Appendix A, p.58) were obtained by the writer for the most part and by the Social Worker in the Research Service. Sources of information included personal interviews with the patients themselves, wherever possible, or with relatives. Information was also obtained from other mental hospitals where some of the patients have been since the study in 1943, or still are, and from records at Worcester State Hospital on patients now in that institution.

The interval histories attempted to obtain information regarding employment adjustment, sexual adjustment, change in home situation, personality makeup, recreational activities, physical and mental condition, and any other factors which gave evidence of being pertinent to or of value in the study.

The interval histories were then analyzed on the basis of data obtained in order to reclassify the overall group into three subgroupings instead of the four used in the 1943 study. The use of four subgroupings at the time of the 1943 study was necessitated because the outcome of Group IV, or hospitalized patients, could not then be properly determined, whereas now, after a lapse of five years, the adjustment of the four men now remaining in Group IV can accurately be considered as

worse than at pre-induction level. An attempt was also made to analyze the social history in order to find significant relationships between the events and the present status of the individual.

In conclusion an effort was made to evaluate the significance of the previous therapy, particularly case work therapy, in an effort to discover to some extent its effectiveness and also to determine whether or not, if case work had been continued over the five-year period, the present outcome in some of the cases might have been different.

CHAPTER II

REVIEW OF LITERATURE

Before proceeding further with the study itself, it seems wise to pause to see what others have to say about war and its effects upon men in the Armed Forces in the area involving the mind and the emotions, and the problems of the readjustment of men thus affected.

"By the spring of 1943 nearly 150,000 soldiers had been discharged for psychiatric causes." [1] And by June, 1946, 448,235 veterans of World War II were receiving disability compensation on account of neuropsychiatric illness.[2] The peak of these World War veterans with psychiatric disabilities is not anticipated to be arrived at until 1975 or later.[3]

In addition to the above figures on men discharged from the services because of psychiatric reasons, it has been estimated that about 1,850,000 men were rejected for psychiatric reasons, and these "psychological 4-F's" represented "12 per cent of the approximate 16,000,000 men examined and 37 per cent of the approximate 5,000,000 rejected for unfitness." [4]

---

1 William C. Menninger, Psychiatry for a Troubled World, p. 40.

2 Thomas A. C. Rennie and Luther E. Woodward, Mental Health in Modern Society, p. 148.

3 Ibid., p. 149.

4 Ibid., p. 4

It might be asked why there were such a large number of men who passed the screening test and were admitted to the service, only to break down later at varying periods of time. What does that prove about the screening tests? Dr. William C. Menninger has the following to say about this:

> At the induction centers psychiatrists (and often non-psychiatrically oriented physicians assigned to that work) were included in the examining line. However, they too often were not used very effectively. In a 2- or 3-minute examination the psychiatrist was expected to evaluate the draftee. Would he or would he not make a good soldier?[5]

> Even with sufficient time allowed at the induction examination to permit the gathering of pertinent information, only those persons could be eliminated who were grossly maladjusted.[6]

> If the preinduction screening had been adequate, it would have eliminated many of these cases on the basis of previous social and medical history. . .It would be very helpful if we could make a better evaluation of the precipitating factors in a psychotic break for the purpose of developing preventive measures. Homesickness was an initial symptom in a third of the cases. . .Many of the soldiers who were taken into the army were away from home for the first time.[7]

It is a known and proven fact, too, that "war reveals facts which in normal times escape attention. . .the number of men rejected prior to induction or discharged from the armed forces for neuropsychiatric reasons was statistical proof of the prevalence of emotional disturbance in the

---

5 Menninger, op. cit., p. 29.

6 Ibid., p. 53.

7 Ibid., pp. 170-172.

population as a whole.[8]

Rennie and Woodward say, too, that "War warps the emotions and personalities of many who wage it and of many who watch."[9] There is little wonder that this is so because, "It is paradoxical that one in our culture should be expected to maim, kill, and destroy, yet that was the required assignment of every fighting soldier."[10] The army psychiatrists looked upon war as "a psychopathological activity which tended to force the development of psychopathology in its participants."[11]

Dr. William Menninger says the following about the adjustment of the civilian to the status of a soldier:

> All the life experience of the soldier either aided or hindered his adjustment in the Army. His personality was largely the composite result of that experience. All of his childhood background added up to or against his credit in terms of character assets or defects.[12]

In the matter of psychotic reactions, Menninger reports that the types of these "did not vary greatly either in kind or in relative proportion, from those seen in civilian life."[13] He goes on to say that a number of studies have revealed that schizophrenia was the most frequently used diagnosis and

---

8 Rennie, op. cit., Preface, p. viii.

9 Ibid.

10 Menninger, op. cit., p. 49.

11 Ibid.

12 Ibid., p. 95

13 Ibid., p. 166

"constituted 60 to 70 per cent of all psychotic reactions."[14]

It is also interesting to note that "the incidence of psychotic reactions was much higher in men with less than one year of military service than in those with two or three years."[15] About this Rennie and Woodward have the following to say:

> It is not surprising, however, that some individuals develop disabling anxiety just before or immediately following induction into service. Indeed, there are cases on record where men have broken down between the hour of induction and the hour of arrival at an army camp.[16]

About the readjustment of the neuropsychiatric veteran, it goes without saying that the neuropsychiatric veteran should have "the sympathy and support of family and friends. He and the public must. . .understand the psychiatric casualty."[17]

> Community responsibility does not cease when the veteran is discharged from the hospital. It should then undertake to teach him a skill and to encourage him to take his part in the life of the community and in a job, if possible.[18]

> The goal of rehabilitation is to bring a man to a point of maximal usefulness to himself and to society, to enable him to sustain himself and to enjoy the fruit of his production. The best criterion of success will be the ability of the soldier

---

14 Ibid.

15 Ibid., p. 170

16 Rennie, op. cit., pp. 88-89

17 Menninger, op. cit., p. 381.

18 George K. Pratt, Soldier to Civilian, p. 160.

to obtain and to hold a job--not any job, but a good job.[19]

Rennie and Woodward say:

> We learned that patients do not function in a vacuum; for even in the military setting and more particularly after return to civilian life, the family, the job, and the community pattern proved to be powerful forces affecting morale and personal adjustment.[20]

Dr. Menninger says about the readjustment of the emotionally handicapped veteran:

> The emotionally handicapped veteran will, in many instances, have special difficulty in again becoming a civilian. In contrast to the scar or amputation, or even the heart disorder, a soldier's fear of his inability to sleep. . .or his excessive concern about his future, shaken self-confidence, and many emotional symptoms are handicaps that only he knows. Because the illness is intangible, because its causes are multiple and often vague, the condition seems mysterious even to the patient. The victim feels people do not understand (and often they do not), and therefore an apology is necessary. Some of these men came into the Army already carrying the burden of mismanaged emotions, of emotional immaturity, or of an unseen psychologically heavy load that kept them in a precarious adjustment as civilians. Many others, however, were sufficiently "normal" for neither themselves nor their family or friends to be aware of any personality difficulties.[21]

Dr. Pratt says about the emotionally handicapped veteran, "It has been our experience that a majority of these people are restored to a fair state of health and productivity merely by discharge from the army and return to old

---

19 Ibid., p. 151

20 Rennie, op. cit., Preface, p. ix.

21 Menninger, op. cit., p. 381.

familiar surroundings."[22]

Dr. Menninger says:

> Only later "follow-ups" will show whether or not the brief treatment of psychotic patients was successful. There is a wide agreement that the psychoses as seen in the Army were not as malignant as those customarily admitted to state mental institutions. There are several reasons for this phenomenon: the Army patients were seen at a much earlier stage of illness; the acute precipitating stresses were promptly alleviated; the illness often sent the patient back to the security of his home; in the latter part of the war he received intensive as well as early treatment which was probably much more adequate than that given in most of our state institutions. In addition, clinical observation indicates that the psychosis with a sudden acute onset clears much more quickly and completely than that which develops insidiously and slowly.[23]

It must never be forgotten that the problem of the readjustment of the soldier as a citizen is one which affects all the citizens of any country.[24] "What is done wisely or unwisely for the veteran will be a sign and measure of our times and a forecast of our future."[25]

"The havoc of this war will breed bitterness and frustration. Not every man is capable of rebuilding his shattered life. . ."[26]

Because the psychiatrists at the Worcester State Hospital recognized the importance of the problem as described in the literature referred to in this chapter, the original

---

22 Pratt, op.cit., p. 166

23 Menninger, op. cit., p. 173

24 G. B. Chisholm, "Psychological Adjustment of Soldiers to Army and to Civilian Life," American Journal of Psychiatry, 101: 309, November, 1944.

25 Pratt, op. cit., Foreword, p. xi.

26 Dixon Wecter, When Johnny Comes Marching Home, p.545

study with veterans was undertaken. Then, realizing, as Dr. Menninger says on the preceding page, the importance of later follow-ups, it was decided that the present study should be undertaken. It was with this in mind, therefore, that the material in the following chapters was gathered and the resultant conclusions made.

CHAPTER III

REVIEW OF STUDY DONE IN 1943

A. Description of Material

In order to have an adequate understanding of the present study, it is necessary to review briefly the study made in 1943 and to restate the conclusions that were arrived at at that time.

In September, 1942, the Research Service (see Appendix D, p. 63) of the Worcester State Hospital, desiring to make some contribution to the war effort in general, began an attempt to determine the etiological factors in the breakdowns of army personnel. It was felt that here, indeed, was a task the hospital could do, and by which it could make a real contribution. From then until October, 1943, 176 military cases were referred to the Research Service and forty-two of these cases were used in the study done in 1943. Here, from a scientific point of view, was a fairly homogeneous and selected group of young men who had developed psychotic breakdowns in a situation which was common to all of them. In this group, then, there were more variables under control than is usually possible in such groups. These forty-two soldiers were Massachusetts residents who had been discharged to their homes from the army, or were sent from army hospitals to the Worcester State Hospital. The majority fell into the latter category. Most of these became ill within the first six months following induction. The psychotic episode of two

of the men started on the day of final induction, for eight more within the following month, and for twenty-four others, within one to six months. In addition, seven men broke down within the six months to one year period after induction. The remaining man served two years before his psychotic break came. Neuropsychiatric studies were done on these men at Worcester State Hospital, appropriate treatment was prescribed and given and when improvement warranted, they were discharged to their homes.

At the time of the first study, it was possible for the interviewing persons to contact all except one of the forty-two men. At the present writing, after the elapse of five years, one man has died and four cannot be located, which is about a 12 per cent loss in the total group.

After admission of the forty-two patients to Worcester State Hospital, the following diagnoses were made: schizophrenia, twenty-two; manic-depressive, five; psychoneurosis, five; psychopathic personality without psychosis, four, undiagnosed psychosis, two; paranoia and paranoid condition,one; alcoholic psychosis, one; involutional depression, one; psychosis due to other metabolic diseases, one. (see Table I, p. 14)

The racial background of the men included Irish,thirteen; American, nine; Polish, seven; French-Canadian, four; Portuguese, two; Italian, two; Scotch-American, two; Scotch-Irish descent, one; Italian descent, one; Greek descent, one. (See

TABLE I.

GENERAL DATA OBTAINED IN 1943 STUDY

		Number of Cases
Diagnosis:	Schizophrenia	22
	Manic Depressive	5
	Psychoneurosis	5
	Psychopathic Personality without Psychosis	4
	Undiagnosed Psychosis	2
	Others	4
Age:	19-23	14
	24-28	12
	29-33	9
	34-38	6
	39-43	1
Civil Status:	Married	3
	Single	37
	Widowed	1
	Divorced or Separated	1
Nationality:	Irish	13
	American	9
	Polish	7
	French-Canadian	4
	Portuguese	2
	Italian	2
	Scotch-American	2
	Scotch-Irish descent	1
	Italian descent	1
	Greek descent	1
Children:	No. of children	6
	No. of cases	5
Intelligence:	Superior	8
	Average	17
	Dull Normal	11
	Borderline	2
	Feebleminded	4
Religion:	Catholic	32
	Protestant	9
	Greek Orthodox	1

Table I, p. 14)

The religion of the men revealed that thirty-two were Catholic, nine were Protestant, one was Greek Orthodox. (See Table I, p. 14)

The ages ranged from nineteen to forty-three at the time of the first study; the majority were between nineteen and twenty-nine, and the average age was 27.6. (See Table I, p.14).

Psychometric tests revealed an I.Q. range of from 60 to 126; the average was 91.5. (See Table I, p. 14)

As a result of the background study, twenty-seven soldiers were found to have had positive heredities; eleven of these had at least two psychotic relatives. Thirteen of the men were considered to have made a good social adjustment; nineteen made fair adjustment, and ten fell into the category of having made a poor adjustment. It was found that eighteen of the men made good economic adjustments; thirteen of them made fair, and eleven showed poor work records. Twenty of the patients gave no history of overt sexual activity; ten, listed as attenuated, showed relative lack of serious interest in girls, or long friendships or engagements; eleven made an average adjustment; only one revealed known abnormal sex behavior. (See Table II, p.16) Thirty-seven were single; three were married; one was widowed, and one was divorced or separated. (See Table I, p. 14)

The socio-dynamic factors occurring in patients were found to be as follows: nineteen men were dependent on or had

TABLE II

SOME IMPORTANT FACTORS FOUND IN BACKGROUND IN 1943 STUDY

		Number of Cases
Social Adjustment:	Good	13
	Fair	19
	Poor	10
Economic Adjustment:	Good	18
	Fair	13
	Poor	11
Sexual Adjustment:	Average	11
	Attenuated	10
	None	20
	Abnormal	1
Socio-Dynamic Factors:	Dependency on Home:	
	By devotion	19
	By hostility	12
	Economic Stress	30
	Sibling Rivalry	19
	Overprotection	18
	Conflict in home	17
	Pushed by parents	14
	Broken home	12
	Disorganized home	10
Factors in Patients Contributing to Breakdown in Army:	Could not keep up	23
	Nostalgia	22
	Physical inadequacy	16
	Picked on by others	14
Personality Traits:	Quiet-passive	37
	Serious-Minded	21
	Feelings of inadequacy and inferiority	24
	Rigid	20

not been emancipated from their homes because of affection, overprotection and devotion; twelve remained dependent on their homes because of rejection and hostility. There was economic stress in thirty cases; sibling rivalry in nineteen; over-protection in eighteen; conflict in home in seventeen; pushed by parents in fourteen cases; broken home in twelve; and dis-organized home in ten. (See Table II, p. 16)

The most common personality traits which were found in these men were: quiet-passive, thirty-seven; serious-minded, twenty-one; feelings of inadequacy and inferiority, twenty-four. In twenty cases there was the tendency to hold rigidly to whatever behavior patterns had been developed. (See Table II, p. 16)

Important factors in the patients which contributed to breakdown in the army were: could not keep up, twenty-three; nostalgia, twenty-two; physical inadequacy, sixteen; picked on by others, fourteen. (See Table II, p. 16)

B. Classification

Having gathered together the above facts, it was then necessary to evaluate each patient separately at the time of the 1943 study, in regard to various adjustments such as social, etc. The next step was to compare those adjustments with his preinduction adjustments, in order to determine whether they were improved, the same or poorer than following his illness.

The bases on which the patients' readjustment was determined were as follows:

1. A more satisfying type of employment from the standpoint of increased earnings and of a more wholesome attitude toward working.
2. Less friction with his family.
3. Personal contentment with his living arrangements.
4. An increased number of social contacts outside of his home and place of employment.
5. Insight into his own difficulties and ability to work out his own problems.

In the course of this follow-up evaluation, it was found that six of the patients were still hospitalized; five of these showed no improvement; one was much better. Ten of the remaining thirty-six men were considered recovered; eleven were much improved; thirteen were improved, and two were unimproved. On the basis of the criteria just given, twelve of the thirty-six men were thought to be adjusting better than they had prior to induction; twenty had returned to their previous level of adjustment (good or bad), and four were making a poorer adjustment than before military service. With the above breakdown in mind, the forty-two men were classified as follows at the time of the 1943 study:

Group I: Post-hospital adjustment better than pre-military one.

Group II-G: Post-hospital adjustment same as before military service, and it was a good adjustment.

Group II-P: Post-hospital adjustment was as poor as the preinduction level of adjustment.

Group III: Post-hospital adjustment worse than it was prior to induction.

Group IV: The men who were still hospitalized.

Study at this time revealed that twenty-eight of the thirty-six men outside the hospital were employed; thirteen were making a good social adjustment; ten were adjusting socially at their preinduction level, which was poor, and four were adjusting at a level lower than at induction.

C. Conclusions

The purpose of the study was to try to understand the problems involved in the readjustment of soldiers discharged for neuropsychiatric reasons during World War II. It was felt that a comprehension of the work done with these men (both psychiatrically and socially), a knowledge of the causes of the military breakdown, and their relation to the clinical pictures, would yield some understanding of the problems encountered in the rehabilitation of patients of this type.

The results were:

(1) Thirty-six (86 per cent) out of forty-two men were adjusting in the community at different levels of adequacy. Twelve were adjusting at a higher level than prior to induction; twenty were adjusting as well as before induction; four were adjusting at a lower level than before entering the service.

(2) A high proportion of the men had returned to their previous level of adjustment after a

shorter period of mental illness than is true of the usual civilian case.

(3) For thirty-two patients, the military situation served as a "trigger mechanism" rather than the actual cause of the mental breakdown; removal from service in many patients cleared up the mental symptoms

(4) The soldier who was quiet, passive, restricted in interests, who was dependent upon his family, rigid, with feelings of inferiority and inadequacy, found it difficult to adjust to being with a large number of strangers and to unfamiliar situations.

(5) Factors which produced feelings of inadequacy and insecurity in the developmental history of these men created psychological problems and conflicts. Among these were economic stress, broken or disorganized homes or conflicts in the homes.

(6) Since the bulk of the men (twenty) returned to their previous level of adjustment, it was felt that the hospital could not take credit for these results. As the men were adjusting as well as before induction, their military and hospital experience seemed to have made very little difference to them. It was in the twelve men who made better adjustment and in the four who were adjusting poorly, that the actual problems in rehabilitation stood out most clearly. Better employment opportunities were important factors for the twelve making better adjustment than prior to induction.

Of the four men adjusting poorly, two because of mental symptoms, the personality problems of the other two prevented a more satisfactory adjustment.

CHAPTER IV

PRESENTATION OF FINDINGS IN INTERVAL HISTORIES

As a result of the present follow-up, it has been decided best to classify the men in three groups instead of four, combining the previous Groups III and IV into the present Group III. Therefore, the reclassification will be as follows: Group I, Better Adjustment Level; Group II-Good; Same as Preinduction Level; Group II-Poor; Same as Preinduction Level, and Group III, Adjustment Worse than Preinduction Level. This condensation has been made possible because at the previous writing, the outcome of the Group IV, or hospitalized patients, could not then be determined as eligible for placement in any of the preceding groups, whereas now, after a lapse of five years, the adjustment of the four men remaining in Group IV can definitely be termed as worse than at preinduction level.

Table III (p. 22) presents a numerical summary of general factors at the time of the present study and includes age, civil status, number of children, racial background, and intelligence.

Information was obtained on thirty-seven out of the forty-two men used in the original study. Of the remaining five, one died in October, 1945 and the whereabouts of the other four could not be determined, nor was it possible to contact any relatives or friends in order to elicit the necessary information. Of the thirty-seven former patients, two are

TABLE III

GENERAL DATA OBTAINED FOR 1948 STUDY

Group		I	II-G	II-P	III	Total
Number of Cases		14	3	4	16	37
Deceased					1	1
Missing			1	2	1	4
Age:	24-29	5		1	7	13
	30-35	5	1	2	4	12
	36-41	2	1		5	8
	42-48	2	1	1		4
Civil Status:	Married	7	1			8
	Single	7	1	4	15	27
	Widowed				1	1
	Divorced or separated		1			1
Children:	No. of Cases	7	2			9
	No. Children	12	5			17
Racial Background:	American	2		1	4	7
	French-Can.	1	1		2	4
	Greek	1				1
	Irish	3	1	1	8	13
	Italian	1		1		2
	Polish	4		1	1	6
	Portuguese				1	1
	Scotch	1	1			2
	Scotch-Irish	1				1
	Above Aver.	2			2	4
	Average	8	3	1	8	20
	Below Aver.	4		3	6	13

now on indefinite visit[1] from the Worcester State Hospital; one escaped from the Worcester State Hospital and is now in his mother's home pending admission to a veterans' hospital; six are in a veterans' hospital. Of the remaining twenty-eight, information was obtained directly from them or their relatives, and in the case of one, because it seemed inadvisable to contact, information was procured through newspaper items, society news columns and indirectly from his friends, so enough has been secured to give ample proof that he is making a pretty good social adjustment.

The age range of the men now is from twenty-four to forty-eight years. (See Table III, p. 22) However, neither the age nor the length of stay in the hospital (See Table IV) offers anything of significance to this study.

TABLE IV

LENGTH OF HOSPITALIZATION OF PATIENTS AT TIME OF 1943 STUDY[2]

Group	I	II-G	II-P	III	Total
Time					
20 days.	1				1
1 month	4	1		4	9
2 months.				1	1
12-18 months. . . .	5	2	4	5	16
20-24 "	2				2
28-30 "	2				2

1 A patient on indefinite visit is one who remains under the supervision of the Hospital for one year following his release, and who reports monthly unless authorized to do otherwise.

2 Excluding six hospitalized men; four missing, one dead.

In evaluating the social, employment and sexual adjustment (See Appendix C, p.61),the criteria of measurement used in the 1943 study were applied to all of the thirty-seven available patients except the six in a veterans' hospital and the one deceased.

With reference to the social adjustment, the data were evaluated in this way: "poor" when the patient had no contacts outside of his home, or where he had overt difficulties with society; "fair" when he had few friends or outside contacts but manifested no overt difficulties with the social milieu; "good" when he had an adequate number of friends and was accepted by others. Eleven men were considered as having made a good adjustment; nine as fair, and eleven as poor. (See Table V, p. 25)

The evaluation of the patient's employment adjustment was rated as "poor" when he had not been working for some time and was making no effort to find work; "fair" when he changed employment frequently due to his own instability or was working at a level below his abilities, and "good" when he gave evidence of steady employment and made changes only because of a desire to improve his situation. Eighteen of the men, or 58 per cent of the measurable group of thirty-one made good employment adjustments; three made fair and ten made poor adjustments. (See Table V, p. 25)

TABLE V

SOME IMPORTANT FACTORS FOUND IN STUDY FOR 1948

		Number of Cases
Social Adjustment:	Good	11
	Fair	9
	Poor	11
Employment Adjustment:	Good	18
	Fair	3
	Poor	10
Sexual Adjustment:	Average	12
	Attenuated	4
	None	15
Personality:	Improved	3
	Same as at Preinduction	22
	Worse than at Preinduction	12*

* Including six in hospital

In evaluating the sexual adjustment, it was considered to be "average" if the patient had made normal heterosexual adjustment, was married, engaged or had social contacts with the opposite sex; "none" if the patient showed no interest in or had little, if any, social contacts with the opposite sex, and "attenuated" if he had a relative lack of serious interest in girls, or if he had been engaged for a long time with no evidence of intent to marry in the near future. Twelve men were judged to have made an average adjustment; four were placed in the category labelled attenuated, and fifteen were considered as having shown no sexual interests. (See Table V)

Seven men were found to have married since the previous

study, making a total of eleven married men out of the known group of thirty-seven. Of these eleven, at the time of the last study, one had been separated and still is; one was a widower and remains in this classification; one was divorced but has married since; one was happily married. In all, seventeen children have been born to these men; the man who separated had three children, who remained with their mother; the widowed man has one child, who lives with patient and the maternal grandmother; the divorced man had one child which has been adopted, and has had none by the present marriage; the married man had one child at the time of the last study and has had one since; of the remaining married men, two have had one child each and four have had two children each. Two other men at present are engaged and plan to marry, although one has had to be classified as attenuated. (See Table III,p.22)

At this time the socio-economic level of the men was taken into consideration and was rated as "poor" when there was evidence of conditions bordering on actual poverty; "marginal" when public welfare would have to be sought immediately if the income from employment ceased; "average" if the home and income were typical of the average economic level; and "comfortable" if the patient lived in the better section of his town or city and showed evidence of being financially affluent. When the thirty-one men were divided into this classification, two were found to be comfortable; twenty were average; seven were marginal, and two were poor.

Eighteen men are living with their parents or siblings; one is living with his deceased wife's mother; one is with the parents of his girl friend; two are rooming alone; nine are living in their own homes, and six are hospitalized.

It was thought that it would be interesting to determine, if possible, whether or not the religious interest of these men had changed at all since their service experience and their mental illness. As far as could be determined at this time, two have ceased attending church at all, two are more devout and thirty-three others have shown no evidence of change in their religious interests or affiliations.

An evaluation of the personality of the available thirty-seven men at the present time, including the six hospitalized men, was made but must be considered only cursory since an extensive investigation could not be done on this due to the rather restricted nature of the study at this date. This was so because it did not seem wise to "stir up" a situation which had been closed in most of the cases for five years and was of such a nature that the men and their families preferred to forget it. However, the evaluation revealed that about 59 per cent of the men (twenty-two) appear to have returned to their preinduction type of personalities and around 8 per cent of the men (three) have improved in personality traits, while around 32 per cent (twelve) men have personality traits which average worse than they were prior to their induction and illness. (See Table V, p. 25) Of the twelve men, six include

those who have been hospitalized since the previous study and have deterioration of personality due to disease; of the six others, four fall into the same category as those with continued hospitalization. In these four there is an active defect due to continued illness; whereas in the remaining two, there is a general "flattening out" of personality due to defect as a result of the disease, but the disease process itself is no longer active. As was stated above, the only source of information about the changes in personality in the patients was the patient himself or his relatives. There was no period of observation nor opportunity to contact persons outside the families or patients in order to have verification of the reports.

Of the thirty-seven men in the study, sixteen have had continued or further hospitalization. Five of them were transferred from Worcester State Hospital to a veterans' hospital, where they have remained ever since.

Eight men were readmitted to Worcester State Hospital after the 1943 study. Five of these had been placed in Group I at that time. One had been placed in Group II-G, two in Group II-P.

Four of these eight patients were eventually transferred to veterans' hospitals from the Worcester State Hospital. One is now at home on indefinite visit; his mental condition has cleared up but he has a progressive crippling physical disease. Another patient was discharged from a veterans' hospital in November, 1946. The third remains hospitalized and his

condition is growing steadily worse. The fourth man died in 1945 of tuberculosis while a patient in a veterans' hospital. Of the four other men, two are on indefinite visit from the Worcester State Hospital, one escaped and is home with his mother, waiting admission to a veterans' hospital. The fourth patient finally had a lobotomy done at Worcester State Hospital and was discharged home in December, 1947, condition improved. This patient is in Group I; the others have been placed in Group III. Three other men have been hospitalized in civilian mental hospitals since the last study, one by court order because of a sexual assault on a nine-year-old girl. He was found to be not insane and was returned to his home after further observation in a second hospital. The other two men have been discharged and are back in their own communities. One of these men was in the 1943 Group I but has now been placed in Group III; one was in Group II-P in 1943 and is now in Group III. The other was and still is in Group III. (See Table VI)

TABLE VI

PATIENTS RECEIVING HOSPITAL CARE SINCE 1943 STUDY

Groups as of 1943	I	II-G	II-P	III & IV	Total
Hospital Care					
Continuous hospitalization since 1943 study				5	5
Readmitted to Worcester State Hospital	5	1	2		8
Admitted to other hospitals	1		1	1	3

As a conclusion to this chapter, it is interesting to note that the patients and their families--those patients not now hospitalized--have preferred to have the patients' hospitalization at Worcester State Hospital remain a closed incident; neither patients nor families talk about it, even among themselves, and it is evident that they feel shame and guilt about the necessity for such a hospitalization.

CHAPTER V

DISCUSSION OF MATERIAL

A. Reclassification of previous groups

Just as with the earlier study, this one, too, is particularly interested in the level of adjustment of these men. The criteria used to evaluate their readjustment were similar to those used in the 1943 study and were as follows:

1. A satisfying employment and a wholesome attitude toward working.
2. Less friction with the family and evidence of an adult relationship to members of the family.
3. Increased number of social contacts with both sexes.
4. Continued mental and emotional health.

Over the five-year period, there has been a major and unexpected shifting of men in the 1943 Group I (Better Adjustment) into the present Group III (Worse Adjustment). The only other major shift was in Group II-G--five men (50 per cent) placed in this group in 1943 have now been placed in the present Group I. However, since this shifting does not represent anything remarkable, the balance of this thesis will be concerned with only the two present Groups I and III in which the most challenging changes took place. (See Appendices B and C, pp.59-62 and Table VII, p. 32)

TABLE VII

NUMBER OF PATIENTS IN GROUPS IN 1943 AND IN 1948

Group	I	II-G	II-P	III	IV	Total
Number of Patients in 1943	12	10	10	4	6	42
Number of Patients in 1948	14	3	4	16		37

Of the previous twelve men classified in Group I, only five now remain in that group, or 41.6 per cent; the other seven men (58.3 per cent) are now in Group III. Seven men remain in the present Group III from 1943, or 69.2 per cent. Five, or 50 per cent, remain in 1948 in the combined 1943 Groups III and IV. Of the other five, three moved into Group I and two into Group II-P. A discussion of the possible causes for the obviously major change in Groups I and III will be conducted later in this chapter, but at this point it seems best to give several histories found in the present Group I and Group III, which are the groups with which this study will deal primarily since, as stated previously, it was in these two groups that the most interesting and challenging shifts and conditions occurred.

The following history has been selected because it is felt that here, in a case which was in Group IV in 1943, active planned therapy on a different basis than originally carried out might be responsible for the patient's present

good adjustment. The case illustrates the importance of not taking a defeatist attitude if a recurrence of illness occurs. This patient went out on visit following a rather routine kind of therapy program. He made a fairly good adjustment for almost the entire twelve months of his trial visit period. However, as his discharge date approached, there was a rather sudden exacerbation of symptoms, and he was returned to the hospital. At the suggestion of the social worker, who felt that there were specific problems in relation to his environment that had not been worked through, a psychiatrist singled him out at that time for intensive treatment. The results obtained are a good example of what a combined use of hospital, psychotherapy and social work can achieve.

BETTER ADJUSTMENT

Group I

F. J., 30 years old, married, white, male, second of three boys. The cultural background of the family was American. The family was average middle-class and had always lived in a semi-rural community. The paternal family were in rather poor circumstances and, in general, the level was lower than that of the maternal side. Within the community the family was somewhat isolated due to its own aloofness. The mother, although active in town affairs and politics, did not mingle in any warm, intimate fashion. The boys also kept to themselves. There was history of mental illness in the family.

The patient started school at the age of six and graduated from high school at the age of seventeen. At the age of nine he developed poliomyelitis and was left with a bad paralysis and atrophy of the right leg. Constant care overcame most of the difficulty, and it did not interfere much with his activities. After graduation from high school, he became

a truck driver, worked steadily but never had a stable job.

His personality was described as reserved and aloof and he tended to keep to himself.

He was engaged at the time of his induction and was delighted that he was considered fit for army service, as he had thought he would be rejected because of his leg. Within a year prior to his induction, the death of his father and his aunt occurred close together and seemed to upset him badly. In the army it became apparent he could not keep up with the other men because of his leg so he was placed on "limited service". His own company was transferred to another camp and he was left behind and assigned to various menial tasks. He developed a sore throat, was sent to an army hospital, and a week later his mental symptoms appeared. He was transferred to another military hospital, discharged from the army and was transferred to Worcester State Hospital for further treatment.

The patient received psychotherapy and social therapy and was released after about two and one-half months, on indefinite visit. He rested at home a few weeks, then obtained work on a Government survey for its duration; next he became employed as a truck driver. He appeared to be getting along fairly well but as the time for his complete discharge from hospital supervision drew near, he began to show increased tension and anxiety and just prior to the discharge date, his condition was so poor that readmission to the hospital was necessary. Immediately following this he was given intensive psychotherapy and social therapy was also undertaken. As a result, when he was again released on visit, it was felt that this time the prognosis was much improved.

That same year he married the girl to whom he had been engaged prior to his induction into the service. They had two children. The marital situation was a happy one. Patient had regular employment and was making a better adjustment than he did prior to military service experience.

Following is a second case in Group I, which although not typical and not representative of any shift, was selected

primarily to illustrate and emphasize the importance of the therapy team not becoming discouraged in its efforts, even though the material with which it is working does not seem particularly encouraging. Had those working with this patient adopted a defeatist attitude, the patient would certainly have moved from his 1943 Group I placement to Group III in the present study.

> K. J., 29 years old, single, white, male, of Polish parentage, the third of six children. There was a history of mental illness in the background. The mother died shortly after the sixth child was born. The father was employed in a factory and was a hard worker, alcoholic, surly, gambled heavily. He married again and there was considerable friction between patient and stepmother. The socio-economic status of the family was only marginal.
>
> The patient adjusted in school at a low average level. At the end of the second half of the seventh grade he was found to have an I.Q. of 74 and since he was doing poorly, he was transferred to a vocational school, where he remained one year. He left at the age of sixteen years. In school, his social adjustment was about average and he was always rather quiet. Just after leaving school, he was arrested for breaking and entering. He was put on probation, and from this point on he began associating with rowdy companions. He worked in a grocery store doing temporary work of part-time nature for about a year and then enlisted in the Civilian Conservation Corps, where he remained eighteen months. He did well there, returned home and was unemployed about a year due to the Depression. During that time he was having considerable conflict with his stepmother. To escape from this, he enlisted in the army.
>
> The patient remained in the army about a year and a half and his family reported a definite personality change; he became sullen, indifferent and withdrawn. He was placed in an army hospital following a breakdown and a diagnosis of Mental Deficiency Moron was made. A little more than a year

later, following his discharge, he was drafted into the army and was sent overseas. He became nervous, heard strange voices, became upset during drills. He was transferred from an army hospital to Worcester State Hospital for treatment. A diagnosis of Hebephrenic Dementia Praecox, with poor prognosis, was made.

In the Worcester State Hospital he was given electric shock treatment. Seven months later he was placed on indefinite visit at a nearby State Hospital, where he was employed with the head farmer. Three months later he was readmitted to Worcester State Hospital because he had a fight with a man at the other hospital. He remained in Worcester State Hospital, and nine months later was given another series of electric shock treatments. He improved to such an extent that two months later he was released on indefinite visit to work on a farm. Five months later he was back in Worcester State Hospital because of tension; that same month he went home with his father on indefinite visit. Later the Social Service Worker found a farm employment for the patient. This lasted only one month when he again had to be returned to Worcester State Hospital and another series of electric shock treatments were given. He seemed to improve for a short period following this treatment, then lapsed into a state of confusion and disorientation and his condition grew steadily worse. It was decided that lobotomy might benefit the patient, and permission was obtained from his family to do so. The operation was performed in 1946 and patient improved and was allowed to go home on indefinite visit in December that year. He was discharged from the hospital in 1947 at the expiration of a year's trial visit; condition on discharge was considered improved. For the past year he has been working steadily as a dishwasher in a hospital near Boston, gets along well with his fellow employees, and appears to be making a better adjustment than he did prior to induction.

Two histories of the group who are making a worse adjustment than before induction follow. The first is illustrative of the case in which no matter what one attempts to do with the social situation, if, in some way or another it does not offer a solution to the basic conflict, the most one can

do is makeshift and little more than temporarily palliative. In this case, the problem was the rejection of the patient by the mother and the patient's inability to free himself from her, accompanied by his constant striving for her affection and acceptance--two things which she has never given him.

ADJUSTMENT WORSE THAN BEFORE INDUCTION

Group III

F. M., 21 years old, single, American. He lived in a suburb of greater Boston, was one of seven children. There was no history of mental illness in the heredity. When the patient was small, the family moved around considerably, as the father was working for a local railroad. The father was described as a domineering person who was seldom at home. He died when the patient was about thirteen years old.

The patient graduated from high school at the age of eighteen, making an average adjustment. It is interesting to note that his best marks were in physical education, and during high school years he was much concerned with his physical condition. After graduation, he had difficulty in finding work, so enlisted in the Civilian Conservation Corps. He was sent to Wyoming but was desperately homesick. After three months, his family found a job for him, and he returned home. For the next two years, he had several jobs but left them because he was dissatisfied. His employers thought well of him.

He was considered by the family as different from the other siblings. He was very quiet,reserved, shy and his main interests were poetry, music, and his own physical condition. He wrote a great deal of poetry and several poems were published in the local paper. He was particularly devoted to his mother, and gave evidence of marked trauma at the birth of a younger sister when he was about four. At the age of seventeen, the patient had an episode of "change of personality"; he became very irritable and turned against the family, especially his mother. This lasted about three months. The mother stated that at that time he had grown very rapidly and the

family considered his changed behavior due to that fact. His exaggerated interest in his physical condition dated from that time. He never showed much interest in social affairs, preferring instead to be alone. He was particularly afraid of girls and would cross the street in order to avoid speaking to them.

He enlisted in the army in January, 1942, and ten days later wrote to his mother that he was in the station hospital because of physical illness. Shortly thereafter, she was notified by army authorities that he was to be discharged because of a neuropsychiatric disability. The patient was returned to his home. A short period of convalescence followed.

Then he began to work for a dairy. He held this job for about four months and toward the end of that period began to show definite mental symptoms. Finally, his condition became serious enough for commitment. The outstanding features were hostility toward his mother, with marked accusations against her, and depression with a question of suicidal attempts.

After eleven months in the Worcester State Hospital, the patient was released under supervision of the hospital. His mental status at that time was much improved.

Inasmuch as he still had feelings of antagonism towards his mother, he did not return home but lived at the Young Men's Christian Association. He visited the social worker regularly. After two months of steady employment, he voluntarily decided to return home.

At the time the follow-up investigation was made in 1943, he had been working steadily and was satisfied with both his employment and living arrangements. He was "dating" a girl regularly, whereas before induction, he would cross the street to avoid speaking to any girl he knew. Both he and his family felt he had improved a great deal in comparison to his pre-military status.

About three months later he was again admitted to Worcester State Hospital. He remained for two years, then went home to his mother on indefinite visit, purchased a small store, failed in this enterprise and lost all his finances in the venture. He

then became depressed, felt unwanted by his mother and within seven months of leaving the hospital had to be admitted again. Six months later Social Service placed him out on a farm, as his mother could not take him. Two months later he was back at the hospital again because he did not like his employer and the latter did not like the patient. That same month Social Service placed him at the Young Men's Christian Association again and found work for him in a factory. Six months later he again had to be readmitted to the hospital because of nervousness; he said at that time that he was tired of living alone and away from his family. A few months later he was placed on indefinite visit with his sister. He went to work, seemed happy but about five months later again was admitted to the hospital because he was nervous and restless. He was given electric shock treatment and improved. Later he ran away from the hospital, went to his mother and she returned him to the hospital. Last year he was thought well enough to place on indefinite visit with his brother. He is still there and appears to be making a fair adjustment.

Following is the second case in this group, which illustrates the patient who, if he had had someone to help him over a severe stress period in his life, might not have had a second breakdown.

M. F., 40 years old, widowed, one of twenty-two children, of whom only eight reached maturity. Patient was the seventh of these and comes from a Portuguese background. The family unit was the center of the family's life and they had a good many social contacts within their own group. The father had all the cultural traits of his group; had been a hard worker and provided well for his family. The mother spoke no English and had no life outside the home and family situation. The background of this patient for mental disease was negative except for one brother who was discharged from the navy with a diagnosis of Constitutional Psychopathic State, and much later he was described as epileptic.

Patient started school at the age of six years. As a child he was always a "good boy" and never

caused his family any trouble and liked to spend much of his time alone. He completed the eighth grade at the age of fifteen, and his marks throughout the school years were average. After leaving school, he had a number of jobs until 1930 when he became steadily employed for six years as a stock room clerk. Because of the Depression, he was then laid off. From the fall of 1937 until late in 1942, he was employed in a factory running a power saw and he was considered a skilled laborer. His work record was good. He was drafted into the army in November, 1942.

The patient was married in 1926 at the age of eighteen as the result of a "childhood romance". He and his wife lived together about twelve years during which time she had ten miscarriages. One child was born to them; a year later she had another miscarriage and died in 1938 of a lung condition. The patient and his wife were devoted to each other. The only child of this marriage is now with the patient and his mother-in-law. There was, however, conflict in the patient's mind over his relationship with his own family and his wife's. Her family was Irish and there was considerable joking about the superiority of one over the other.

In March, 1943, this patient returned on furlough to the home of his mother-in-law. He complained of headaches and said he had been dropped from a stretcher during stretcher drill and had struck his head. However, there was no evidence of serious injury. On his return to his camp, he continued to complain of headaches and was finally admitted to the army hospital from which he was transferred to Worcester State Hospital in February of 1943. He was discharged about one month later as recovered, prognosis fair to good. Treatment given was psychotherapy, social therapy and electric shock therapy. In November of that same year, a follow-up investigation was made. He seemed to be making a good work adjustment but did complain of being tired most of the time; he showed no interest in the opposite sex, belonged to an orchestra group, bowled, and went to the movies.

In 1946, one of his brothers had to be admitted to a local state hospital for mentally ill persons. The patient is said to have been the one to have had him admitted; three weeks later this

brother died after having accused patient of having placed him in the hospital after he (the brother) had been the person to take patient from Worcester State Hospital. Patient worried over this, became depressed, was taken to a local hospital and later admitted to a veterans' hospital for care in December, 1946. He was given a diagnosis of Dementia Praecox, Paranoid Type, and the hospital reported that he appeared well enough when he left there to take on his former responsibilities. However, up to the time of this study, patient has made no effort to find employment; he seems normal but without any ambition and is content to live with his mother-in-law even though he is contributing barely anything for his own and his son's support in this household. He does not go out very often and is adjusting poorly in all areas.

B. Discussion of Shiftings in the Groups, Particularly in Groups I and III.

Since the greatest amount of change during the five years has taken place in Groups I and the present III and IV combined into Group III, it is with the men in these groups that this section will deal in an effort to determine, if possible, some of the causal factors behind these changes.

Of the original twelve men in Group I, five still remain in this group, five have been transferred into the group from 1943 Group II-G; one from Group II-P; one from Group III; and two from Group IV. Of the original four in Group III, one still remains; seven have been transferred to the group from Group I, four from Group II-P; one from Group II-G; and four from Group IV. (See Appendices B and C, pp.59-62)

The hereditary background of the two groups showed that in the present Group I, five had at least one case of

"nervousness", "queerness", psychopathy, or chronic alcoholism in the family, whereas in Group III, nine patients had this type of background. In Group I, four men had more than one instance of psychotic behavior among near relatives, whereas only one man in Group III fell into this category. Six men each in Groups I and III had negative backgrounds. (See Appendix C, p.61)

The socio-economic level of the various groups is significant in that eleven out of fourteen are average in Group I, one is comfortable and two are marginal. In Group III, four are average, four are marginal and two are rated as poor. Just what is the significance of this is difficult to determine--whether the economic stress in Group III contributes to the disease or does the disease contribute to and engender the poor economic condition? The burden of opinion today is that economic stress contributes to psychotic breakdowns, especially those found in the different types of Dementia Praecox. Poverty is painful, so the patient turns to fantasy as a way out. In a study done on World War II selectees in 1944, it was found that "the total incidence of major mental disorders increased gradually from 7.3 per cent in the best communities to 16.6 per cent in the poorest communities."[1] The same study also revealed that "withdrawal

1 Robert W. Hyde and Lowell V. Kingsley, "The Relation of Mental Disorders to the Community Socio-economic Level," New England Journal of Medicine, 231: 548, October 19, 1944.

as a result of submission to stress of life, a symptom seen in Dementia Praecox, the most frequent psychosis in the selectee age group, is most frequent at the lowest socio-economic level."[2]

A study of the prognoses made on these patients at the time of the 1943 study (See Appendix C, p. 61) revealed that in the 1948 Group I the prognoses on three had been good, favorable or fairly good; four had been fair or guarded; four had been poor, and on three no prognosis had been made. In the 1948 Group III, the prognosis on one had been fair, guarded on one, poor on thirteen and on one none had been given. This would seem to indicate that the preponderance of the men given better prognoses are now found in Group I, and the patients given poor prognoses have now fallen into Group III. At the time of the 1943 study, Group I contained three favorable or fair prognoses, one guarded, six poor, and on two no prognoses were made. Groups III and IV in 1943 contained two good prognoses, one fair, five poor and on two no prognoses were made. Prognosis is of only limited significance, however, since, especially in relation to Dementia Praecox, the psychiatrists' knowledge is as yet not sufficient to permit unqualified assurance as to eventual outcome.

---

[2] Ibid., p. 548.

The diagnoses as they appear in Groups I and III (See Table VIII, p. 45) are not significant and appear to offer no solution to shifts in the groups. There have been five changes in diagnoses since the 1943 study, but these do not add weight in any noticeable direction.

As regards the social, economic and sexual adjustment (See Appendix C, p.61) of the Groups I and III, there is the following data to be considered. In Group I, eight men have made a good social adjustment; five, fair, and one, poor. The one who is making a poor social adjustment is rooming alone, has few, if any, friends, which is similar to his preinduction level, but his employment adjustment is far superior to what it was, as at the preinduction level he was working in a numbers racket, which at best was precarious and gave no evidence of stability on the patient's part. Eight are making an average sex adjustment and seven of these, or 50 per cent of the total group of fourteen, are married, and all seven had children either before or since the 1943 study. One of these who in 1943 was in Group II-G and who had an abnormal sex adjustment due to the fact that he had been having sex relations with his sisters, is now married. This patient had a good prognosis, was given extensive social therapy and some psychotherapy after leaving Worcester State Hospital, and although he went through a severe stress period when one of his sisters became psychotic and was admitted to a state hospital for the mentally ill, he has now made a good

TABLE VIII

DIAGNOSIS OF PATIENTS AT TIME OF LAST STUDY AND CHANGES SINCE

Group	I	II-G	II-P	III	Total	Changes
Diagnosis						
Dementia Praecox						
Hebephrenic	2		1	3	6	
Catatonic	2			2		
Paranoid	1	1		1	3	
Simple			1		1	
Other types	2			4*	6	1* to Hebephrenic
Manic Depressive						
Manic	1	1			2	
Depressive	1				1	
Psychoneurosis						
Mixed	2			1*	3	1* to Dementia Prae.. other types.
Reactive-depression				1	1	
Psychopathic Personality without Psychosis	1*			1**	2	1* to Dementia Prae., Paranoid 1** to Manic Dep.,Depressive
Undiagnosed	1*			1	2	1* to Dementia Prae., Simple
Others		1	1	2	4	

adjustment in all fields. Two are designated as attenuated, four have made no adjustment. All fourteen in Group I are making a good employment adjustment. In Group III, three are making a fair social adjustment; seven, poor; six are hospitalized. Two are making fair employment adjustment; eight, poor; six are hospitalized. One is making an average sexual adjustment; eight have shown no overt sexual interest; one falls into the attenuated category; six are hospitalized.

Treatment given these men evidently yields no obvious clue to the reason for the present shifting of the groups. It may be noted, however, that out of eleven having electric shock treatment in the present Groups I and III, seven fell in Group III; of sixteen men having social therapy in the present Groups I and III, eleven were in Group I; of six having only routine treatment, five were in Group III and one in Group I. (See Table IX)

TABLE IX

TREATMENT GIVEN PATIENTS

Group	I	II-G	II-P	III	Total
Treatment					
Routine	1		3	5	9
Psychotherapy	6	1		6	13
Metrazol	2		1	1	4
Electric Shock	4	2	1	7	14
Endocrine	1			3	4
Social Therapy	11	3	1	5	20
Lobotomy	1			1	2

One patient in the present Group III received two series of electric shock treatment; one received four series of endocrine treatment and another received two series of the same treatment. One patient in Group I received four series of electric shock treatment; another had two or three series.

Regarding the social therapy, it can be said that in the cases of at least three of the men now in Group III, who were previously in Group I, if they could have kept in close contact with a social worker so that when things went wrong, they would have had someone to turn to immediately, the chances of their remaining in Group I and making at least a fairly adequate adjustment would have been better. In all three cases, periods of stress arose which precipitated the patients into further breakdowns. One was the patient M. F., whose case was discussed on pages 39-41 of this thesis. Another patient became unemployed and has never seemed able to make a concerted or determined effort to find further employment, has been out of work more than a year and is making a poor adjustment in all areas. The third patient slipped back into extreme passivity and withdrawal due to lack of an understanding person to help him to get started again or to keep him going. Of course, in order to hold such persons afloat, it would take a tremendous number of social workers to act as "crutches", which is more or less the role which social workers have to play with many of these patients who have weak or inadequate

personalities, and the expense would be great. As further proof of the value of social therapy, there are five men now in Group I who received intensive social therapy along with other treatment and at least as a partial result have remained in or are now placed in Group I.

Among the men now in Group III, excluding the six patients discharged from Worcester State Hospital to veterans' hospitals and still there, and the one who is deceased, there are at least seven good examples of interval stresses which brought, or helped to bring about, a recurrence of mental illness. There are the first two cases described in the preceding paragraph. Then there are five others--two men broke down again because of hostility towards their mothers; one of these was also disappointed in love. One (see case of F. M., discussed on page 37 of this thesis) was in Group I in the 1943 study, the other in Group II-P. Both are now in Group III. Two men had recurrences because of guilt feelings caused by the serious illness of their male parents. One of these was in Group I in 1943; the other was in Group II-P. Both are now in Group III. One patient had such severe personality defects that although he was discharged from Worcester State Hospital as recovered, the prognosis was poor, and he was not out of the hospital long before he started drinking heavily again and had another psychotic episode, later following by tuberculosis, from which he is now recovered. This patient was in Group III in the

1943 study and still remains there.

The two patients who moved from the 1943 Group IV to the present Group I did so following continued hospitalization, psychotherapy and social therapy. The one patient who was shifted from the 1943 Group III to the present Group I was given intensive social therapy and for the past four years has been working steadily at the same place of employment, is living with his mother and apparently adjusting better than at preinduction.

One patient who was shifted from the 1943 Group II-G to the present Group I was given a prognosis of poor by all the staff except one doctor who dissented on the ground that preservation of keen interest in family affairs and the presence of empathic response were favorable signs. The patient has been fortunate in that he has been able to maintain the necessary interest in his family and they, in turn, have given him the required warmth and understanding, so that today, despite the doubtful prognosis, he is making a good adjustment in all fields and plans to be married soon.

CHAPTER VI

SUMMARY AND CONCLUSIONS

In summary, an examination of the data of this study in relation to the study made in 1943 does not yield too much in the way of positive findings. There are certain points, however, that are worthy of comment and from which something has been learned.

The outstanding feature in comparing the two studies was the shift downward of the majority of cases in the 1943 Group I (seven out of twelve). An examination of this shift leads to certain possible conclusions.

First of all, one general conclusion suggested itself--that is, that it pays to be very cautious when cases are classified on a prognostic basis. The question that then arose as the shift in Group I was realized was: What factors can be found that might account for the shift? In regard to this, certain points might be mentioned.

1. Basis of that classification in the first place. Looking back, it now seems apparent that some "wishful thinking" may have played a part in that the classification may have been influenced by two factors. The cases were active social service cases at the time and had gone out into an unusually favorable social situation. It now becomes clear how important it is to make follow-up studies of this kind to check such ratings since future events play such a

significant part in the later course of the patients' adjustment.

2. Personality type of this group. As a group, the personality profile as described in 1943 was quiet-passive, serious, conscientious and hard-working, reserved and undemonstrative, restricted in their contacts and "tied to the home", and characterized by feelings of inferiority and inadequacy. They tended to hold rigidly to the behavior patterns they had developed. (See Table X, page 54)

3. Family relationship. The family constellation for the 1943 Group I was one in which the mother played the dominant role and much of the patient's needs and interest were centered around her. As a group, these patients were not emancipated from this relationship to the mother.

When this group left the hospital, they went into a social situation which, as already mentioned, was unusually favorable. The war was still going on and it was at the height of the "manpower shortage". This operated in their favor in a number of ways. Jobs were plentiful, paid well and were easy to get. Many of the men had good jobs for the first time in their lives, most of them having grown up in the late Depression period. Heterosexual contacts were much easier to establish because of the great dearth of young, single men. At home, the more aggressive, successful brothers were away in service, leaving the patients in a position of increased responsibility and prestige.

In this easier situation, the patients were able to get along well; but as the war ended and the veterans began to come home in large numbers, the competition again became very great and the former difficulties began to reappear. Contact with Social Service had disappeared and the men were left to meet the stresses unaided. Perhaps the very fact of a period of success made the reawakening of the old painful patterns even more traumatic. When the stress period had continued for a while or when an unusually traumatic incident occurred, the patient broke down again or, at best, gave up the struggle and was content to drift.

The question can be raised here as to whether continued supervision, even though of a minimal kind, might have prevented a recurrence of the maladjustment if help had been available.

In regard to the present 1948 Group I, the following points seem significant:

1. Personality type. This is different from the original Group I. The profile of the present Group I is described as quiet but not as passive. They were ambitious as well as hard-working, a trait that was not used to describe a single member of the other group. They were a more friendly, outgoing group and there was evidence of more expression of affect in that half of the group was described as "moody". There was little evidence of feelings of inferiority and inadequacy. (See Table X, page 54)

2. Family relationships. The mother played a much less important role in the family set-up of this group and the father figure was much more predominant.

In general the men in the present Group I were much less tied to the home and this probably has considerable bearing on the significantly different heterosexual adjustment made by the two groups. Seven members of the present Group I are married and two more are engaged in contrast to the fact that of the original Group I who became worse, not one was married or engaged. The question might be raised as to whether or not the fact that they are five years older might have some bearing. However, since this factor is true of both groups, its importance is certainly not too significant.

The members of the present Group I, too, went out into a favorable social situation but were apparently much more able to take advantage of their opportunities. Since the social situation was comparable for both groups, the differences in their over-all reaction to it must lie in the personality differences. It is interesting to note that the preinduction social and employment adjustment of this group was slightly lower than the original Group I, which, taking the Depression era into account, suggests that this may have been due more to external factors than to personality inadequacies of the men in the present Group I. Given better opportunities, they were able to benefit from them. (See Table X, page 54)

TABLE X

PREINDUCTION LEVELS AND PERSONALITY

Group	I (1943)	I (1948)
Social Adjustment		
Good	4	4
Fair	7	8
Poor	1	2
Employment Adjustment		
Good	8	5
Fair	3	6
Poor	1	3
Personality Traits*		
Quiet-passive	12	
Serious-minded	10	
Conscientious	8	
Rigid	9	
Devoted to family	8	
Feelings of inferiority	10	
Restricted	10	
Quiet, not passive		9
Hard-working		7
Friendly		6
Moody		6

* Note that number of factors exceed number of patients.

In conclusion, it is regrettable to have to state that in all the cases contacted in this 1948 study, patients and families alike have preferred to have the patient's hospitalization because of mental illness remain a "closed book". There are two reasons for this. The first is that they have regarded the necessity for the hospitalization as a reflection upon themselves. The second reason is fear of what other people would say if they knew that the patient's family had had one of their members in a hospital because of mental illness. This indicates that there is still much to be done in the way of educating people about mental illness and in liberating them from the old idea that it is disgraceful and has a stigma attached to it.

Approved,

Richard K. Conant

Richard K. Conant
Dean

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Chisholm, G. B., "Psychological Adjustment of Soldiers to Army and to Civilian Life," American Journal of Psychiatry, 101: 300-309, November, 1944.

2. Hyde, Robert W. and Lowell V. Kingsley, "The Relation of Mental Disorders to the Community Socioeconomic Level," New England Journal of Medicine, 231: 543-548, October 19, 1944.

3. Malamud, Irene T. and Rachel B. Stephenson, "A Study of the Rehabilitation of Neuropsychiatric Casualties Occurring in the Armed Forces," Applied Anthropology, 3: 1-15, January-March, 1944.

4. Menninger, William C., Psychiatry For a Troubled World. New York: The Macmillan Company, 1948.

5. Pratt, George K., Soldier to Civilian. New York: McGraw-Hill Book Company, Inc., 1944.

6. Rennie, Thomas A. C. and Luther E. Woodward, Mental Health in Modern Society. New York: The Commonwealth Fund, 1948.

7. Wecter, Dixon, When Johnny Comes Marching Home. Cambridge, Massachusetts: Houghton Mifflin Company, 1944.

APPENDIX A

Interval Social History

I. Employment History

- A. Number of jobs
- B. Length of time on each
- C. Reason for leaving
- D. Length of time on present job
- E. Relation of job to capacity--higher or lower than previous to illness
- F. Attitude towards his work
- G. Relationship to employer and fellow employees
- H. Attitude toward his veteran status
  - 1. Attitude towards receiving or not receiving compensation

II. Family Relationships

- A. Any moves since 1943 (indicate places of residence, relation to people involved)
- B. Relationship to parents and siblings

III. Sexual Adjustment

- A. Married or engaged since 1943
  - 1. If married, relationships between his marital family group and his own family group
- B. More or less interested in girls than before
- C. Changes in marital situation
  - 1. Divorce or separation
  - 2. Children or increase in children
  - 3. Reaction to birth of first child

IV. Social Attitudes

- A. Attitude toward the world about him in general--situation at home, in the U. S., international, etc.

V. Miscellaneous

- A. Health
  - 1. Precipitating factors if a second breakdown occurred
- B. Recreational interests
- C. Religious interests (note any change)

VI. Estimate of Present Personality

- A. Changes in contrast to preinduction period

APPENDIX B

1943 Work Sheet*

Anamnestic Data Chart[a]

(Group I: Better Adjustment Level)

Name	Heredity[b]	Social Adjustment	Economic Adjustment	Sex Adjustment
F.B.	+ +	Fair	Good	None ?H.[c]
L.F.	+	Fair	Good	Atten.[d]
M.F.	+	Good	Good	Average
J.H.	0	Good	Good	Atten.
K.J.	+ +	Poor	Poor	None
D.L.	0	Fair	Good	None
F.M.	0	Fair	Fair	None
L.M.	0	Fair	Good	Average
A.N.	0	Fair	Fair	None
M.N.	0	Good	Fair	Atten.
T.R.	+ +	Fair	Good	None ?H
F.S.	0	Good	Good	None
	(Group II: Good: Same as Preinduction Level)			
G.A.	0	Good	Good	Average
G.Ba.	+	Fair	Fair	None
G.Be.	+	Good	Good	Abnormal
S.B.	+	Fair	Fair	Average
K.K.	0	Good	Fair	None
J.L.	0	Good	Good	Average
M.M.	+	Good	Good	None
E.N.	0	Fair	Fair	Atten.
A.S.	+	Fair	Fair	Atten.
J.T.	+ +	Good	Good	Average
	(Group II: Poor; Same as preinduction Level)			
E.B.	+ +	Poor	Poor	Average
H.H.	+ +	Poor	Poor	None
D.K.	0	Poor	Poor	Atten.
R.M.	0	Fair	Fair	None
W.P.	+	Fair	Fair	Atten.
H.R.	+ +	Poor	Poor	Average
D.R.	+	Fair	Poor	None
C.S.	+	Poor	Poor	Average

Name	Heredity	Social Adjustment	Economic Adjustment	Sex Adjustment
W.S.	+	Poor	Poor	None
G.W.	+	Poor	Poor	None
(Group III: Adjustment Worse than Preinduction Level)				
A.B.	+	Fair	Good	None
S.K.	0	Fair	Good	None
W.L.	+ +	Good	Good	Average
A.T.	0	Fair	Good	None
(Group IV: Hospitalized Patients)				
G.H.	+	Fair	Poor	None
F.J.	+ +	Good	Fair	Atten.
J.K.	+	Poor	Poor	None
T.L.	+	Fair	Fair	Average
J.M.	+ +	Poor	Poor	Atten.
H.Q.	+	Good	Good	Atten.

* This work sheet is only a small part of all the work sheets.

[a]This chart includes only the evaluated material of the entire anamnestic data chart.

[b]Two plus marks indicate that there was evidence of more than one instance of psychotic behavior among near relatives; one plus mark showed that there was at least one case of "nervousness", "queerness", psychopathy, or chronic alcoholism in the family; and, negative (0), where there was no evidence of psychotic or other abnormal behavior.

[c]Question of homosexuality.

[d]Attentuated: Relative lack of serious interest in girls or long friendships or engagements.

APPENDIX C

1948 Work Sheet*

Name	Heredity[a]	Social Adjustment	Employment Adjustment	Sex Adjustment	Prognosis at Time of 1943 Study
(Group I: Better Adjustment Level)					
G. Ba.	+	Good	Good	Average	Poor[b]
G. Be.	+	Good	Good	Average	Good
S. B.	+	Good	Good	Average	Poor
J. H.	0	Good	Good	Average	Favorable
K. J.	+ +	Fair	Good	None	Poor
F. J.	+ +	Good	Good	Average	Fairly good
S. K.	0	Fair	Good	None	None made
D. L.	0	Fair	Good	None	Fair
J. M.	+ +	Fair	Good	Atten.[c]	None made
E. N.	0	Good	Good	Average	Fair or guarded
M. N.	0	Good	Good	Average	Poor for long term
T. R.	+ +	Fair	Good	Average	None made
D. R.	+	Good	Good	Atten.	Fair or guarded
A. S.	+	Poor	Good	None	Guarded for future
(Group II: Good; Same as Preinduction Level)					
G. A.	0	Good	Good	Average	Excellent
J. L.	0	Good	Good	Average	Good
M. M.	+	Good	Good	None	None made
J. T.			(MISSING)[d]		
(Group II: Poor; Same as Preinduction Level)					
E. B.			(MISSING)[d]		
W. L.	+ +	Fair	Good	Atten.	Fair
W. P.	+	Poor	Poor	None	Good
H. R.	+	Poor	Fair	Average	Poor
C. S.			(MISSING)[d]		
A. T.	0	Poor	Poor	None	Good (has reached original level)
(Group III: Adjustment Worse than Preinduction Level)					
A. B.	+	Poor	Poor	None	Poor

Name	Heredity	Social Adjustment	Employment Adjustment	Sex Adjustment	Prognosis at time of 1943 Study
F. B.	+	Poor	Poor	None	None made
L. F.	+	Fair	Poor	None	Guarded
M. F.	+	Poor	Poor	None	Fair
H. H.			(MISSING)[d]		
G. H.	+		(IN HOSPITAL)		
J. K.	+		(IN HOSPITAL)		
D. K.	0		(IN HOSPITAL)		
K. K.	0	Poor	Poor	None	Poor
T. L.	+		(IN HOSPITAL)		
L. M.	0	Poor	Poor	None	Very poor
F. M.[e]	0	Fair	Fair	Average	Poor
R. M.	0		(IN HOSPITAL)		Recurrences likely--poor
A. N.			(DECEASED)		
H. Q.	+		(IN HOSPITAL)		
W. S.	+	Fair	Fair	Atten.	Liable to recurrences under stress--poor
F. S.[f]	0	Poor	Poor	None	Poor
G. W.	+	Poor	Poor	None	Poor

*This work sheet is only a small part of all the work sheets.

[a]See Appexdix A for explanation.

[b]One doctor dissented on the ground that preservation of keen interest in family affairs and the presence of empathic response were favorable signs.

[c]Attenuated: Relative lack of serious interest in girls or long friendships or engagements.

[d]Missing but left in same group.

[e]On indefinite visit from Worcester State Hospital and s till under that hospital's supervision.

[f]Escaped from Worcester State Hospital; at home pending admission to a veterans' hospital.

APPENDIX D

THE RESEARCH SERVICE OF THE WORCESTER STATE HOSPITAL

The Research Service of the Worcester State Hospital was started in the fall of 1927. It was organized as a joint undertaking of the Hospital and of the Memorial Foundation for Neuro-Endocrine Research. The latter organization had been started earlier in the year to initiate and support investigations regarding the cause, prevention, and treatment of the schizophrenic psychosis. The role of the Foundation was to deal with the "physiological" aspects of the research, whereas the psychiatric, psychological, and sociological aspects were considered as the particular field of interest for the Hospital proper. Financial support was secured through a special contribution from the Commonwealth and through funds allocated by the Rockefeller Foundation. The endeavor, from the start was to make a well-rounded, integrated attack upon the problems; the joint funds being utilized for the common end.

In the earliest years of the work, the administrative supervision was vested in Dr. R. G. Hoskins who had given up the headship of the Department of Physiology of the Ohio State University to become the Director of Research of the Memorial Foundation, and in Dr. Francis H. Sleeper, of the Worcester State Hospital Staff. They were designated as Director and Resident Director, respectively, of the Research Service.

The first approach to the problems was to study the extent of endocrine involvement in schizophrenia. Next, the scope was broadened to encompass a study of the abnormalities of metabolism, without restricting the interest in the endocrine factors. In this second phase, the Service commenced using normal subjects as controls. Later, when duly impressed by the variability of the metabolic approach, it began the study of the factor of variability. In this third phase of its growth, a group of patients were tested and retested over a period of seven months at the metabolic, physical, psychological and clinical-psychiatric levels. From this phase, it progressed to the study of insulin treatment, and is recalled as being the first in the United States to begin an investigation of this problem. Interest centered in 1) empirical effectiveness of the method, 2) mechanisms of effects, and 3) criteria for the selection of cases for treatment. Included later were the metrazol and electro-shock methods.

Shortly after the beginning of World War II, the Research Service entered upon the fifth phase of its emphasis, that of endeavoring to understand the etiological factors in the breakdowns of soldiers in the Army situation, for the purpose of screening processes and evaluating therapeutic measures.